STUDY OF THE EFFECTIVENESS OF "PRIVATIZING" REMEDIAL SERVICES

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INTRODUCTION

One of the policy questions raised by the Maryland Higher Education Commission in its 1996 report, A Study of Remedial Education at Maryland Public Campuses, was "How much remedial education is appropriate at the college level and who should provide it?" A new approach that has received attention in Maryland is contracting out remedial services to the private sector. Sylvan Learning Systems, a Baltimore-based tutoring company, has offered a series of remedial math courses in cooperation with Howard Community College and, very recently, with Towson State University. In accepting the remedial education study, the Commission asked the staff "to research the effectiveness of 'privatizing' remedial services through contracts with tutoring companies."

This report presents the findings of this inquiry. The concept of "privatizing" or "out sourcing" remedial education at colleges and universities has little precedent. The staff reviewed the literature about remedial programs, including unpublished sources, to learn the extent to which this issue has been studied. In addition, national sources were contacted to determine whether colleges and universities in other states have engaged private companies to handle all or part of their remedial education programs. Little activity is in progress at this time, although a number of companies are exploring the higher education market, including Kaplan, TRO, and Academic Systems Corporation. Hence, most of the information for this analysis was drawn from a report prepared by staff at Howard Community College, interviews with staff (including the chief academic officer) at Howard and with a Sylvan staff member heavily involved with its higher education projects, and a review of evaluations from Howard students provided by the college. Conclusions about the merits of "out sourcing" remedial education by higher education institutions and the conditions that are needed to maximize the success of such efforts are discussed.

THE HOWARD/SYLVAN EXPERIMENT

The mathematics department at Howard Community College, which prides itself on its use of state-of-the art methods to teach underprepared students and on success rates in its remedial courses, recently began exploring alternatives for the delivery of this form of education. Its action was prompted by three factors. First, administrators at Howard expressed concern about the amount of human, financial and facility-related resources needed to operate the remedial studies program. There was a desire to free full-time faculty to teach more college-level coursework and to shift more responsibility for teaching remedial classes to less expensive instructors. Second, the upgrading of the general education math requirements in the State raised the expectation that a larger percentage of Howard's new freshmen would need to take remedial math. Howard's figures are already high. The Commission's remedial education study found that more than two-thirds of the freshmen who enrolled in Howard directly from high school were assessed as needing remediation in math, considerably above the State average for community colleges. The percentage may even be greater among all students: in 1993, nearly 90

percent of the students who took Howard's placement test needed remedial help in math. Third, department faculty were concerned by the poor persistence patterns of one cohort of students with especially low levels of math competency.

In Spring 1995, the presidents of Howard and Sylvan began discussions about a joint venture. The idea was that Sylvan, whose core business is a nationwide chain of tutoring centers which serve public school students and adults in the workforce, could contract its services to Howard with the goal of improving the success rates of certain groups of remedial students at a lower cost. After a month of planning, in which Howard faculty met with Sylvan officials and reviewed their instructional materials, a pilot project was established with both parties sharing its costs. A Sylvan College Study Center was set up at Howard Community College. The program represented Sylvan's first partnership with a higher education institution as well as one of the first attempts at "privatizing" remedial education at the college level nationally.

During the first summer term of 1995, Sylvan instructors began teaching two remedial math courses in arithmetic or pre-algebra (MA 090) and basic algebra (MA 092) at Howard with a total of 22 students. The company's classes had a student/faculty ratio of 6:1, compared to a typical remedial class at Howard in which the proportion of students to instructors was four times as great. In addition, Sylvan provided individualized instruction for each student, and its teachers were available for twice the scheduled number of office hours as were traditional full-time faculty. Students in the Sylvan sections were provided with the same access to college advising, tutoring and support services as were other Howard students, and the Sylvan instructors used the same midterm and final examinations that were given in the sections taught by Howard faculty. The students in the Sylvan classes paid the regular tuition and fees to Howard. The college catalog did not identify who was teaching the respective sections of the classes. In the second summer term, Sylvan was assigned another class of 14 students. Howard was sufficiently satisfied with the results to proceed with the second phase of the experiment.

This phase took place during the 1995 Fall semester. Four sections of basic algebra were assigned to Sylvan instructors and 21 to Howard faculty. The 88 Sylvan students were selected in a manner that ensured that they reflected the characteristics of the 476 Howard students in terms of gender, race, number of credit hours, full- and part-time status, and age. After the end of the Fall term, the two sections were compared on a number of evaluation measures, including performance on the midterm and final examinations, attendance, cumulative grade point average, and pre- and post-test scores on an adaptive placement test prepared by The College Board. Except on the midterm exam, where Howard students did better, there was no statistically significant differences between the performance of the two groups.

Comparison of Mean Scores for HCC/Sylvan Sections MA 092 - Fall 1995

	All	HCC	Sylvan
	Sections		
Midterm Exam*	80.3	81.9	73.0
Attendance Points	48.8	49.1	47.0
Homework Points	14.9	14.9	15.1
Final Exam	153.9	153.9	154.1
GPA	2.8	2.8	2.9
Pre-Test	56.1	56.1	56.1
Post-Test	90.3	92.9	87.4

^{*}Significant Difference

Nor was there any statistically significant difference between the Sylvan and Howard sections in terms of student success in these courses, measured by the percentage of students who earned at least a grade of "C".

Students Earning A's, B's, or C's for HCC/Sylvan Sections MA 092 - Fall 1995

	All Sections		All Sections HCC Sections		Sylvan Sections	
	Students	Percent	Students	Percent	Students	Percent
Overall	357	63.3%	298	62.6%	59	67.0%

Based on these results, Howard decided to continue the study. The third phase took place in the Spring 1996 semester. Students who took the Sylvan and Howard math classes the preceding Fall were tracked to determine whether or not they returned for the Spring term and, if they did, how they performed in their math course during that semester. Unlike in previous terms, the Sylvan sections were identified in the college catalog, and students were required to pay a \$115 surcharge above the normal tuition and fees for the lower student/teacher ratio. This made the course fee for the Sylvan section more than four times the amount of standard remedial classes. Howard students persisted at a higher rate than their Sylvan counterparts.

Student Persistence from Fall 1995 to Spring 1996

(Students enrolled in Fall 1995 in MA 092 in Sylvan of HCC sections and continuing in further math classes (MA 094, MA 122, or MA 126)

	HCC	Sylvan
Fall Enrollment	476	88
Returned in Spring	223	28
% Persisting *	46.8%	31.8%

^{*} Significant Difference

A comparison also was made of the course success rates of students in the Sylvan and Howard sections in Spring 1996. This represented the first test of the performance of students who had self-selected a Sylvan class as opposed to being assigned randomly to it. However, the Sylvan and Howard sections remained generally alike in terms of the characteristics of the students.

The results were mixed. There were no statistically significant differences between the Sylvan and Howard sections in the arithmetic (pre-algebra) classes. However, it deserves to be mentioned that half of the students in the Sylvan sections were repeaters, and likely weaker students, as compared to a quarter of those in the Howard sections. Of the Spring 1996 students who took basic algebra, the students who selected the Sylvan classes and paid the extra fee for a reduced student/faculty ratio had a much better success rate than their counterparts in the Howard sections (80 percent to 56 percent).

Students Earning A's, B's, or C's for HCC/Sylvan Sections A 090 - Spring 1996

	All Sections		HCC S	Sections	Sylvan Sections	
	Started/	Percent	Started/	Percent	Started/	Percent
	A, B, or		A, B, or		A, B, or	
	C		C		C	
Overall	182/100	54.9%	161/89	55.3%	21/11	52.4%

Students Earning A's, B's, or C's for HCC/Sylvan Sections MA 092 - Spring 1996

	All Sections		HCC S	ections	Sylvan S	Sections
	Started/ A, B, or C	Percent	Started/ A, B, or C	Percent	Started/ A, B, or C	Percent
Overall*	356/212	59.6%	305/171	56.1%	51/41	80.4%

^{*} Significant Difference

The fourth phase of the study was conducted in Fall 1996. A team of Howard and Sylvan faculty developed a new model for the experimental classes that blended features of both approaches and was designed to reduce costs. As a result, the classes taught by Sylvan in Fall 1996 had a higher student/faculty ratio (12:1) and used Howard's interactive arithmetic and algebra software in the computer labs. Students selected the particular sections they wished to take and were assessed a \$90 fee beyond normal tuition for choosing a Sylvan class. This was \$25 less than students in the Sylvan sections were charged the previous Spring. Students in the Sylvan sections of both the arithmetic and algebra/geometry classes achieved a higher passing rate than did those in the sections taught by Howard faculty. However, the difference between the two algebra/geometry sections was not statistically significant. Howard has made a decision to continue the experiment through at least Fall 1997.

Students Earning A's, B's, or C's for HCC/Sylvan Sections MA 060 - Fall 1996

	All Sections		HCC S	ections	Sylvan Sections	
	Started/ A, B, or C	Percent	Started/ A, B, or C	Percent	Started/ A, B, or C	Percent
Overall*	198/153	77.3%	111/78	70.3%	87/75	86.2%

*Significant Difference

Students Earning A's, B's, or C's for HCC/Sylvan Sections MA 061 - Fall 1996

	All Sections		ns HCC Sections		Sylvan Sections	
	Started/ Percent		Started/	Percent	Started/	Percent
	A, B, or		A, B, or		A, B, or	
	C		C		C	
Overall	267/146	54.7%	200/104	52.0%	67/42	62.7%

PERCEPTIONS OF THE HOWARD AND SYLVAN STAFF

To ensure the frankness of responses, separate interviews were conducted with the staff of Howard Community College and those of Sylvan Learning Systems. Both were asked to relate the conclusions they have drawn as a result of their experience with the pilot project. Several common themes emerged in the discussion:

Most faculty will support this type of venture, although early skepticism can be expected.

Howard's staff said that this approach represented "a new paradigm for our faculty." The decision was made in part to house the experiment in the math department because its faculty "were very accommodating to the Sylvan people...the math faculty embraced them and wanted them to succeed, even though there was initially a fearful reaction...there was lots of concern from the faculty about how Sylvan staff was treating students, what the students were getting for their money. But the faculty wanted to give the experiment a fair hearing and wanted it to work. Howard is an institution that wants to break new ground on approaches to learning." In contrast, those interviewed acknowledged that there was resistance from the reading/language arts faculty to a similar experiment in that department.

Sylvan's representative praised the Howard staff: "They were interested in doing something different. They were not a roadblock." He agreed that the math faculty were much more receptive than those in reading.

Cooperation between a private contractor and the faculty and staff of the campus is essential if the effort is to succeed.

Howard's staff said that Sylvan's personnel got off to a rocky start in their relationship to the faculty: "Initially, they wanted to have their own classes and instructors, didn't want a collaborative effort. They felt they had the solution and could do it better than the school. They found out quickly that higher education is a different business from K-12. Sylvan initially said, 'we'll do it our way', and it wasn't a good fit. For this type of relationship to work, there must be coordination; people have to speak to each other."

Sylvan's representative acknowledged that his company "learned a great deal about the culture of higher education as a result of our experience with Howard and now Towson." He expressed surprise by the power that faculty have on campus and described it as a "new experience" to which Sylvan needed to adapt. However, he stressed that Sylvan tries to be supplemental to the college's efforts in remedial education, not competitive with its faculty.

Private companies must be able to adjust quickly if they are to be effective.

Sylvan's staff member reported that "we had to modify some of our instructional pedagogy in a hurry. We are agile and can respond quickly when faced with a challenge." Howard's staff agreed with this assessment and gave Sylvan credit for flexibility. "Sylvan wanted the experiment to work, so they were willing to make changes. They wanted to exceed the performance of Howard's staff so that they would be invited back." Howard's staff also offered the view that "Sylvan's model changed every semester, and it is looking more like Howard Community College's approach every term."

Both parties were satisfied with the outcome of the experiment, but with some qualifications.

A Howard staff member said, "The Sylvan approach has some merit, but our institution has to continually monitor it. Quality has improved over time, but a lot of it has to do with technical assistance provided by Howard's staff. Sylvan needs to develop a more realistic understanding of the needs of college students and how they differ from K-12, a more realistic sense of what their staff can accomplish in a class, and a better understanding of higher education."

Sylvan's representative was positive about the long-term prospects for the higher education venture, including its profitability for the company. He expressed optimism that Sylvan "will be able to turn a profit eventually and make modest returns." He said that it is not attractive financially at this time. "We knew going in that this was not going to be a profitable relationship immediately, but we made a business decision to break into a new area. We are now breaking even as a result of the extra fee we charge students in exchange for the smaller class size." He added, "we are working hard to create an institutional model that makes sense, is affordable, and allows Sylvan to generate a reasonable return."

STUDENT EVALUATIONS

Students in the Fall 1995 sections of the math remedial classes taught by Howard faculty and Sylvan instructors gave high marks to both. On all three summary questions on the evaluation form, Howard's faculty did just slightly better.

	Sylvan	Howard CC
Positive evaluation of faculty	79.5%	82.9%
Would you like to have this	76.5%	81.6%
instructor again?		
Improved attitude toward the	80.5%	81.4%
academic field		

The students also were asked to make general observations about aspects of the course or instructor they liked best and on ways these could be improved. In the Howard sections, the evaluations applied to just one instructor, while the student comments in the Sylvan sections might refer to several teachers. Nearly three-fourths of the remarks made about both the Howard and Sylvan sections were positive.

What students liked best about the Sylvan classes:

- Self-paced says it all. Instructors are <u>very</u> willing to put in the extra time and effort to be sure everyone understood and could execute their work.
- I liked the open labs that they had because you could come in almost every day including some Saturdays.
- The one-on-one teacher-student relationship. This has really helped me to learn more and develop faster than I probably would have.

What students liked best about the Howard classes:

- Excellent teaching and communication skills...ability to address diverse group in terms of various levels of proficiency.
- Instilled confidence in my ability to do the coursework required. Extremely patient and excellent at explaining both simple and difficult problems. Does not skip steps causing weaker students to get lost half way through the problem.
- Our instructor is wonderful at teaching adults who have been away from math. Helps one to overcome their math fears and treats them with respect.

CONCLUSIONS

These are the major conclusions drawn by Commission staff from the experience of Howard Community College and Sylvan Learning Systems with regard to "privatizing" math remedial education:

From the perspective of the students who enrolled in Sylvan's sections, the program has been a success so far. Evaluations conducted by Howard Community College found an overwhelming majority of the students in Sylvan's Fall 1995 remedial math classes to be pleased with the instruction they received. Students cited the more personalized attention they got and the ability to work at their own pace--attributes stressed by Sylvan in its publications. However, these students had been randomly assigned to the Sylvan sections and were not required to pay the additional fee that went into affect in Spring 1996. It will be revealing to compare these evaluations with those of students who self-selected the Sylvan sections and paid considerably more for them. These and future students will be the true judges of the cost-effectiveness of Sylvan's instruction. It also must be noted that students who attended the sections taught by Howard Community College faculty awarded slightly higher evaluations than did students in the Sylvan classes.

The study conducted by Howard Community College did not provide conclusive evidence that students in the smaller, more personalized Sylvan sections perform better or are more successful in future college work than those who enroll in a traditional class. The Sylvan model has produced results on par with those of traditional remedial classes. Howard study noted, "More research needs to be conducted to determine the efficacy of this privatized alternative for delivering developmental mathematics courses." In general, there was little difference between the performance of students in the Sylvan and Howard basic algebra sections in Fall 1995 on a variety of measures, including their final examination, grade point average, scores on a placement test, and ultimate success in the course. A greater percentage of students in the Howard classes persisted to the Spring 1996 term. In the classes offered in the Spring 1996 term, the first in which students were able to self-select a Sylvan section and pay an increased fee in exchange for a lower student-faculty ratio, the results were mixed. There was little difference between the course success rates of Howard and Sylvan students in the arithmetic (pre-algebra) classes. However, the success rates of Sylvan students in the basic algebra class (80 percent) greatly exceeded that of their Howard counterparts (56 percent). In addition, students in the Sylvan sections of both arithmetic and algebra/geometry in the Fall 1996 term achieved higher passing rates than did those enrolled in the Howard classes, even though the results were statistically significant only for arithmetic.

In any case, the results from the three semesters are still insufficient to draw conclusions about the program's success. However, the results of phase four provide an encouraging sign for the Sylvan experiment. This is particularly true since some of the methodology used by Sylvan in its classes has undergone changes, and the faculty/student ratio has increased. Long-term success rates of students in the two types of remedial courses, which will be available in subsequent years, also will help administrators to evaluate the merits of the Sylvan approach. Howard Community College intends to continue to track the persistence and subsequent performance of

these students. An examination of the experiences of Towson State University students who enroll in the remedial math sections taught by Sylvan instructors at that institution will provide additional insight about the delivery of this form of education by private companies. Sylvan began delivering instruction to 112 remedial mathematics students at Towson in Spring 1997

Joint ventures between higher education institutions and private companies to offer remedial services will be successful to the extent that strong, collaborative relationships are established between the parties. Each must view the other as partners not competitors. Tutoring companies must be knowledgeable about and sensitive to the special culture of colleges and universities and must respect the role of faculty in making curriculum decisions. Companies cannot simply "set up shop" on a campus and operate their classes in virtual isolation from the rest of the institution. Similarly, faculty and administrators who are responsible for remedial education need to avoid reacting defensively to experiments with the private sector and must work positively with their new colleagues and assist them to make the effort successful. Both sides need to keep in mind that they have a common goal: helping students to master the basic skills they need to perform well in college-level work. The interviews with Sylvan and Howard staff revealed that some of these problems emerged during their experiment but have been resolved for the most part.

Private companies considering the higher education market in remediation should examine carefully Sylvan's experience, particularly as it relates to the short-term profitability of a venture. Sylvan's staff seemed very pleased with the Howard experience, and the company is now also delivering sections of remedial math at Towson. Sylvan believes that it can provide a model that makes sense educationally, is cost-effective, and allows the company to earn a reasonable return in the long-term. Sylvan executives have expressed the hope that the Howard project will serve as a prototype for other partnerships with colleges and universities in the State and nationally. However, Sylvan's experience suggests that companies may need to be patient in terms of the balance sheet. At this time, Sylvan is only breaking even at Howard--and that is the result of a hefty supplemental fee charged to students. It is yet to be established that enrollments in these sections will be sufficient to make them profitable. Hence, companies interested in offering remedial education services to colleges and universities should not expect to earn a quick profit from their enterprises. They need to have a long-term perspective which envisions earning a respectable amount on their investment if their product proves attractive to students.